CLAIMS:

1. An article comprising a thermoplastic composition comprising a thermoplastic resin and an inorganic biocidal agent,

wherein the thermoplastic resin comprises a homopolymer or a copolymer of a polycarbonate, a polyester, a polyacrylate, a polyamide, a polyetherimide, a polyphenylene ether, or a combination comprising one or more of the foregoing resins,

wherein the article has a biocidal metal release factor of greater than 2.5 from an exterior surface,

wherein biocidal metal release in parts per billion is measured by contacting 5 cm by 5 cm of the exterior surface with 40 milliliters of 0.8% weight/volume of sodium nitrate for 24 hours at 25° C to form a test solution, and measuring an amount of biocidal metal in the test solution in parts per billion, and

wherein the biocidal metal release factor is the amount of biocidal metal in the test solution in parts per billion divided by a product of a weight percent of the inorganic biocidal agent based on the total weight of the article and the weight percent of biocidal metal in the inorganic biocidal agent.

2. The article of Claim 1, wherein the biocidal metal release factor is greater than or equal to about 3.

3. The article of Claim 1, comprising a textured exterior surface over at least a portion thereof, wherein the textured exterior surface comprises the thermoplastic resin and the biocidal inorganic agent.

4. The article of Claim 1, wherein the inorganic biocidal agent is a biocidal zeolite.

5. The article of Claim 1, wherein the exterior surface is in the form of a layer disposed over at least a portion of the article.

6. An article comprising a textured exterior surface covering at least a portion thereof, wherein the textured exterior surface comprises an inorganic biocidal agent and a first thermoplastic resin.

7. The article of Claim 6, wherein the first thermoplastic resin, is a homopolymer or a copolymer of a polycarbonate, a polyester, a polyacrylate, a polyamide, a polyetherimide, a polyphenylene ether, or a combination comprising one or more of the foregoing resins.

8. The article of Claim 6, wherein the texturing is effective to produce biocidal activity.

9. The article of Claim 6, wherein texturing is effective to kill at least 50% of a pathogenic organism in contact with the exterior surface over a period of 24 hours at 25°C.

10. The article of Claim 6, wherein the textured exterior surface is in the form of a layer disposed on at least a portion of the article.

11. The article of Claim 10, wherein at least a portion of the article other than the textured exterior surface comprises a second thermoplastic resin that is the same as or different than the first thermoplastic resin.

12. The article of Claim 11, wherein at least a portion of the article other than the textured exterior surface comprises an inorganic biocidal agent that is the same as or different than the inorganic biocidal agent in the textured exterior surface.

13. The article of Claim 8, wherein the biocidal activity is an anti-microbial efficacy that is greater than or equal to about 70% killing of an E. coli culture or a Staphlococcus aureus culture, measured by contacting the exterior textured surface of the article with the E. coli culture or the Staphlococcus aureus culture, incubating the article for 24 hours at 37°C, and determining the percentage of killing of the E. coli culture or the Staphlococcus aureus culture.

14. The article of Claim 6, wherein the inorganic biocidal agent comprises a biocidal metal comprising silver, gold, copper, zinc, mercury, tin, lead, bismuth, cadmium, chromium, thallium, or a combination comprising one or more of the foregoing biocidal metals.

15. The article of Claim 14, wherein the inorganic biocidal agent is in the form of a metal salt, a hydroxyapatite, a zirconium phosphate, or a zeolite comprising at least one of the biocidal metals, or a combination comprising one or more of the foregoing forms.

16. The article of Claim 10, wherein the textured exterior surface layer has a thickness of about 5 micrometers to about 150 micrometers.

17. The article of Claim 6, in the form of a film, a sheet, or a multi-wall sheet.

18. The article of Claim 6, wherein the texturing is provided by chemical or mechanical abrasion of at least a portion of the outer surface.

19. The article of Claim 6, wherein the article reduces the growth of a pathogenic organism comprising Bacillus cereus, Escherchia coli, Pseudomonas aeruginosa, Staphylococcus aureus, Streptococcus feacalis, Salmonella gallinarum, Vibrio parahaemdyticus, Candida albicans, Streptococcus mutans, Legionella pneumophila, Fuso bacterium, Aspergillus niger, Aureobasidium pullulans, Cheatomium globosum, Gliocladium virens, Pencillum funiculosum, Saccharomyces cerevisiae, a Herpes simplex virus, a polio viruses, a hepatitis B virus, a hepatitis C virus, an influenza virus, a sendai virus, a sindbis virus, a vaccinia virus, a severe acute respiratory syndrome virus, or a combination comprising one or more of the foregoing organisms.

20. A method of making a textured article, comprising chemically or mechanically abrading an exterior surface of an article to form a textured exterior surface, wherein the exterior surface comprises an inorganic biocidal agent and a first thermoplastic resin, and wherein abrading results in an improvement in biocidal activity in the textured article compared to an untextured article.

21. A method of making a textured article, comprising
calendering an article to provide a textured exterior surface over at least a portion of the article, wherein the surface of a roller in contact with the exterior surface of the article comprises surface discontinuities, and wherein the textured exterior surface of the article comprises an inorganic biocidal agent and a first thermoplastic resin.

22. A method of making a textured article, comprising
molding an article to provide a textured exterior surface over at least a portion of the article, wherein the surface of a mold in contact with the exterior surface of the article comprises surface discontinuities, and wherein the textured exterior surface of the artic le comprises an inorganic biocidal agent and a first thermoplastic resin.